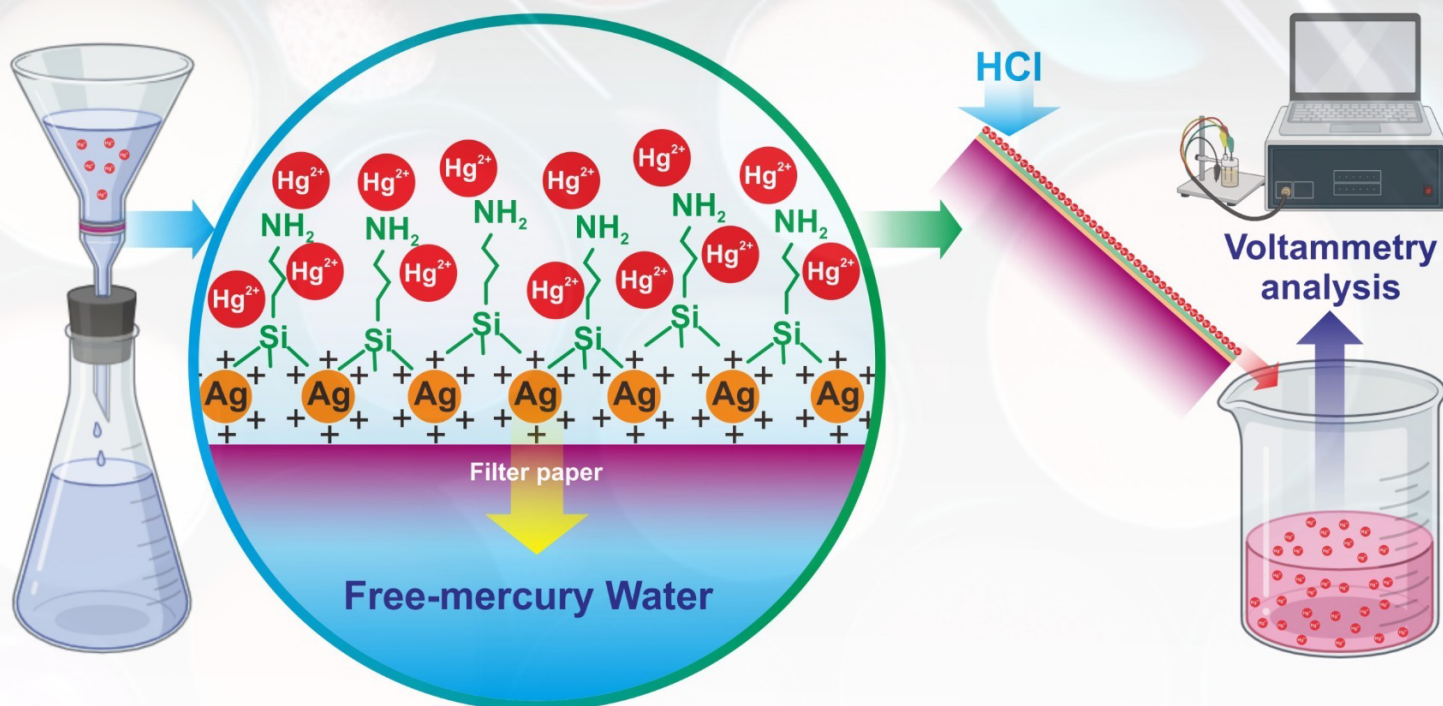


Volume 7
Issue 1
March 2024

IJCA

Indonesian Journal of Chemical Analysis



UNIVERSITAS
ISLAM
INDONESIA

Ind. J. Chem. Anal.

p-ISSN 2622-7401
e-ISSN 2622-7126

<https://journal.uii.ac.id/IJCA>

PREFACE

Congratulations to the authors whose articles have been published in the Indonesian Journal of Chemical Analysis (IJCA) Vol 7(1) 2024. We express our highest appreciation to the authors entrusted with publishing their research work with the Indonesian Journal of Chemical Analysis (IJCA). The articles in this issue present research results not only related to the field of analytical chemistry but also across several related studies in the field of chemistry, such as environmental chemistry, halal food authentication, and advanced material characterizations and , with broad potential applications.

We express our gratitude to loyal readers and to reviewers from universities and institutions in Indonesia and abroad who have taken the time to provide feedback and insights on articles submitted to the Indonesian Journal of Chemical Analysis (IJCA). The reviewers have genuinely provided constructive information and comments so that the quality of the articles and the originality of the published articles can be maintained and trusted.

We hope the articles published by the Indonesian Journal of Chemical Analysis (IJCA) can become a reference for chemistry research, mainly applied chemistry.

Yogyakarta, March 2024



Editor IJCA

Indonesian Journal of Chemical Analysis (IJCA)

Ind. J. Chem. Anal.
Vol. 07, No. 01, hal. 1-108
March 2024

Editorials Team

Editor-in-Chief:

Ganjar Fadillah, S.Si., M.Si

Universitas Islam Indonesia

Editor Managing:

Rahmat Hidayat, S.Si., M.Si.

Politeknik Negeri Lampung

Editorial Boards:

Prof. Tawfik A. Saleh

KFUPM, Saudi Arabia

Prof. Dr. Santiago Gomez Ruiz

Ray Juan Carlos University, Spain

Prof. Roger Narayan

North Caroline University, USA

Dr. Mohd Nur Ashraf Yusoff

University of Malaya, Malaysia

Kentaro Saeki, Ph.D

University of the Ryukyus, Japan

Md. Aminul Haque, Ph.D

Jagannath University, Bangladesh

Dr. Chanat Aonbangkhen

Chulalongkorn University, Thailand

Dr. Muhammad Yudhistira Azis

Institut Teknologi Bandung, Indonesia

Ade Danova, Ph.D.

Institut Teknologi Bandung, Indonesia

Dian Ayu Setyorini

Institut Teknologi Bandung, Indonesia

Muhamad Allan Serunting

Institut Teknologi Sumatera, Indonesia

Bayu Wiyantoko

Universitas Islam Indonesia, Indonesia

Dr. Reni Banowati Istiningrum

Universitas Islam Indonesia, Indonesia

Administrator

Rizal Arrosyid

Universitas Islam Indonesia

Published by:

Univesitas Islam Indonesia

email : ijca@uii.ac.id

web : <http://journal.uui.ac.id/IJCA>

Indexed in:



**THE EDITORS AND PUBLISHER OF IJCA THANK ALL REVIEWERS FOR THEIR VALUABLE TIME
AND EFFORT TO REVIEW THE PUBLISHED MANUSCRIPT IN VOL. 7 NO. 1, MARCH 2024**

Prof. Dr. Suprpto DEA	Institut Teknologi Sepuluh November, Indonesia
Prof. Sulistyو Saputro, Ph.D	Universitas Sebelas Maret, Indonesia
Prof. Dr. M Bachri Amran	Institut Teknologi Bandung, Indonesia
Prof. Riyanto PhD	Universitas Islam Indonesia, Indonesia
Dr. Maisari Utami	Universitas Islam Indonesia, Indonesia
Nguyen Ly Sy Phu, Ph. D	University of Science, VNUHCM, Vietnam
Nguyen Thanh Tam, Ph. D	University of Science, VNUHCM, Vietnam
Dr. Abu Masykur	Universitas Sebelas Maret, Indonesia
Dr. Noor Fitri	Universitas Islam Indonesia, Indonesia
Dr. Asih Triastuti	Universitas Islam Indonesia, Indonesia
Prof. Dr. Sayekti Wahyuningsih	Universitas Sebelas Maret, Indonesia
Dr. Tini Agustini Koesmawati	Indonesia Institute of Science, Indonesia
Lina Mahardiani, Ph.D	Universitas Sebelas Maret, Indonesia
Satya Candra Wibawa Sakti, Ph.D	Universitas Airlangga, Indonesia
Wiyogo Prio Wicaksono, M.Si.	Universitas Islam Indonesia, Indonesia
Thorikul Huda, M.Sc.	Universitas Islam Indonesia, Indonesia
Yuli Rohyami, M.Sc.	Universitas Islam Indonesia, Indonesia
Nurlatifah, M.Sc.	Kumamoto University, Japan
Kennis Rozana, M.Si.	Universitas Negeri Malang, Indonesia
Ozi Adi Saputra, M.Si.	National Taiwan University, Taiwan
Sista Werdyani, M. Biotech.	Universitas Islam Indonesia, Indonesia
Febi Indah Fajarwati, M.Sc.	Universitas Islam Indonesia, Indonesia

Table of contents

No.	Tittle	Pages
1	The Identification of Acetic Acid-Ethanol Mixture Using Gas Sensor Array and Ensemble Regression <i>Suprpto Suprpto, Yatim Lailun Ni'mah, Harmami Harmami, Ita Ulfin, Annisa Ardiyanti</i>	1-11
2	Adsorption of Cadmium (II) Ions Using Cassava Peel Activated Carbon: Study of Adsorption Kinetics, Isotherms and Thermodynamics <i>Tri Ariyanto Nugroho, Cucun Alep Riyanto, November Rianto Aminu</i>	12-22
3	Adsorption of Remazol Blue And Indigosol Yellow Mixed Dyes Using Bidara Arab Leaves (<i>Ziziphus spina-christi</i>) <i>Mega Kurnia, Suprpto Suprpto, Yatim Lailun Ni'mah</i>	23-33
4	Green-AgNPs modified membrane for monitoring mercury ions in cosmetic sample using pre-concentration assisted voltammetry technique <i>Ganjar Fadillah, Eka Nurdina Inayatssholeha, Rahmat Hidayat</i>	34-42
5	Determination of Ethanol in Vinegar and Beverage by Gas Chromatography: A Validated Method for Halal Verification <i>Yulirohyami, Aprisilia Risky Wijaya, Yorfan Ruwindya</i>	43-52
6	Implementing Biodigester Technology for Sustainable Waste Management in Mojokerto City, Indonesia <i>Mega Mutiara Sari, Anshah Silmi Afifah, I Wayan Koko Suryawan</i>	53-63
7	Detection of Adulterants Metanil Yellow in Turmeric Powder Using Fourier Transform Infrared (FTIR) Spectroscopy Combined with Chemometrics OPLS-DA and PLS <i>Syahril Maulid Dia, Anggita Rosiana Putri, Luthfi Ahmad Muchlashi</i>	64-71
8	In Vitro Activity of Ethanol Extract of Rimbang Fruit (<i>Solanum ferox</i>) as an Active Ingredient in Sunscreen Preparations <i>Septaria Yolan Kalalinggi, Rasidah, Yuliana</i>	
9	The Role of Zeolite (Microporous Crystalline Aluminosilicates) In Catalytic Pyrolysis of Waste High- and Low-Density Polyethylene Bags for Production of Fuel and Chemicals: A Review <i>Umar Muhammad Jibreel, Amina Salihi Bayero, Musa Ibrahim Mohamaed, Bashir Audu Muzakkari</i>	72-81
10	Detection of Microplastics and Heavy Metals in Famous Edible Molluscs in Can Gio Biosphere Reserve of Vietnam <i>Vo Thi Kim Khuyen, Vo Thi Thien Kim</i>	97-108